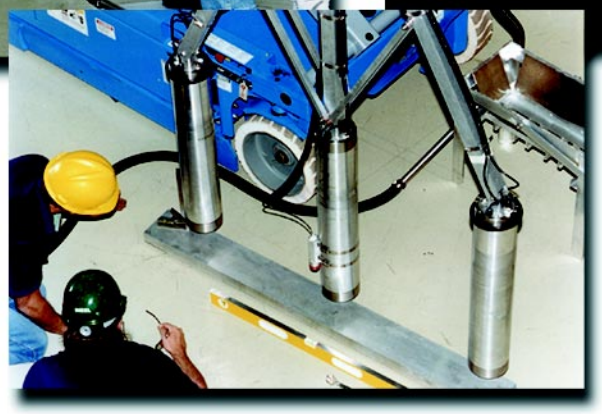
PN01-377-2-9

PN01-0469-02-34



PN01-377-2-19

INTEC 603 Basin Floor Scanner

Problem
The INEEL's Emptied Spent Nuclear Fuel Facilities project needed to survey large areas of radioactive contamination on underwater spent fuel storage basin floors.

Baseline Technology
No baseline technology.

Innovative Technology
The INEEL-developed Idaho Nuclear Technology and Engineering Center (INTEC) 603 Basin Floor Scanner integrates a submersible gamma-ray detection system with position locating systems to automate mapping of radioactive contaminants on fuel storage basin floors. The system also identifies suspect spent fuel objects containing as little as one-half gram of U-235.

Comparison
This basin floor scanner technology automated mapping of spent fuel storage basin floors and identified suspect spent fuel objects – a capability that was previously non-existent.

Benefits
This system enabled the project to automatically map high-activity areas on water-filled spent fuel basin floors, and reduce worker health and safety risks associated with basin sludge removal.

SPENT NUCLEAR FUEL PROGRAM

Project: ID-SNF-103
Emptied Spent Nuclear Fuel Facilities